STORING AND RESTORING SNAPSHOTS OF COMPUTER PROCESS

ABSTRACT OF THE DISCLOSURE

A method to trace a variable or other expression through a computer program is disclosed. A user determines the variable and the conditions upon which activity of the variable will be monitored. As a result of the invention, every time that variable is referenced in a memory operation or other activity by the program and the conditions set forth by the user are satisfied, the state of that variable is saved as a snapshot without interrupting or stopping execution of the program. The snapshots are accumulated in a history table. The history table can be retrieved and the state of the variable in any given snapshot can be restored. Other variables and expressions can be attached to the trigger variable and the states of these other variables at the time of the activity of the trigger variable may also be saved in the snapshot. The method may be incorporated into a program as a tracing device or a program product separate from the logical processing device executing the program.